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REMARKS

Claims 1-30 are pending in the application.

Claims 1-30 are rejected.

Claims 1, 2, 13, 21 and 22 are amended herein.

Claims

All pending claims in the application have been rejected under 35 USC §103(a) as being obvious over Gallant et al. (US 2004/0258239) in view of Tomoike (US 2001/0055285), and further in view of applicants' Background of the Invention.

Applicants respectfully request withdrawal of the Examiner's rejections regarding Claims 1-30. Applicants submit that the present invention, as set forth in the claims, is non-obvious in view of the combination of cited references, since a person skilled in the art would not be motivated to combine the references in the manner suggested by the Examiner. In addition, the claims are believed to be distinguishable over cited references, since all of the limitations of the claims as presented are not found in the cited references, even if combined as suggested.

The Gallant et. al. reference (hereinafter Gallant) describes a method for dynamically selecting a destination gateway to complete a call over a path supported at least in part by an IP network and a public switched telephone network (PSTN). The reference does not address gateway selection in the context of a mobile network, whereas applicants' claimed invention has a mobile user aspect in each of the pending claims. As such, location management of mobile terminals is one important aspect and function of a mobile network, which applicants utilized to devise their invention. On the other hand, a traditional PSTN network does not have to address location management issues of mobile terminals as in a mobile network. Accordingly, a person skilled in the art would not look to the Gallant reference when attempting to derive a gateway selection

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methodology for mobile networks, this is because there is no mobile network aspect to the teachings of Gallant, nor is there any suggestion that the teachings of Gallant would be applicable to mobile networks.

Applicants also respectfully submit the Tomoike reference should not be properly combined with the Gallant reference to form the rejections as set forth in the Office Action. This is because Tomoike addresses a load balancing issue of content retrieval when a request is initiated from a mobile terminal. The reference discloses methods for a network to choose a proxy gateway so that the gateway is not overloaded. This is different from the present invention which addresses optimal gateway selection when a call is offered to a mobile user using the location information of the call recipient. Since neither of the cited references directly or indirectly addresses the problems which are solved by the present invention, applicants respectfully submit that their combination is improper to form the basis of the currently standing rejection.

As stated previously, applicants respectfully submit that even if the references were combined as suggested by the Examiner, that all of the limitations of the claims would still not be met. With regard to independent Claims 1, 12 and 21, for example, each of the claims calls for a type of unified location management device which has location information for users' different technologies stored therein -- including location information of the mobile users. Accordingly, the present invention enables optimal gateway selection based on this location information, which is neither taught nor suggested by the combination of prior art. The Gallant reference does not disclose any unified location manager for mobile terminals. In the present invention, the unified location information manager (UMM) of mobile terminals is relied upon to select an optimal gateway for call routing. Moreover, there is no criterion for selecting a gateway in the Gallant reference invention, for example, as by location or to minimize a certain type of routing as in Claims 2, 13 and 22. In Gallant, the RS merely sends a list of gateways to the SPS, and the SPS tries them one by one until an available gateway is found. In applicants' invention, they optimize the

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gateway selection by certain criteria, e.g., minimizing circuit switched portion of a call, or triangle routing.

Additionally, the Tomoike reference does not address the deficiencies of the Gallant reference. Once again, the Tomoike reference does not disclose any unified location manager for mobile terminals. As stated Tomoike addresses a load balancing issue of content retrieval when a request is initiated from a mobile terminal. The reference discloses methods for a network to choose a proxy gateway so that the gateway is not overloaded. Thus, the gateway selection is made based on the load situation of the gateway not the location information of one of the users. (See for example paragraph 20.) As has already been described, this is different from the present invention which addresses optimal gateway selection when a call is offered to a mobile user using the location information of the call recipient.

With regard to Claims 2, 13 and 23, the combination of the prior art neither discloses, nor suggests being able to minimize either one of triangle routing, PSTN call leg, or Internet call leg. As was explained in the background and in the Detailed Description at pages 3-6, the prior art was incapable of being able to the PSTN call leg as well as minimize triangle routing in the ANSI41 case. As explained in the Summary, the UMM is capable of holding location information for diverse cellular networks, as well as for Internet telephony systems. For cellular networks, UMM acts as a traditional HLR; for an Internet telephony network, it acts as the entities that are responsible for user/terminal registration (registrar in SIP, gatekeeper in H.323) and address resolution (proxy server in SIP, gatekeeper in H.323). An optimal gateway selection is possible based on location related information provided by the UMM which had not previously been available. Utilizing the newly available information enables a gateway to be selected which may, for example, enable the circuit switched portion of a call to now be minimized. Since the prior art does not teach being able to minimize any one of the three criterion claimed in Claims 2, 13 and 23, applicants submit that these claims should be allowable.

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With regard to Claims 4, 7, 9, 15, 19, 24 and 28, the Tomoike reference is discussing the registration scenario, where only the P-TMSI ID (locally unique to MMS, not globally unique, and thus cannot be used for routing) is assigned. P-TMSI has nothing to do with a location dependent routable temporary telephone number, and cannot serve as an ID to select a gateway upon call delivery. A location depending routable temporary telephone number is only assigned upon call setup by contacting an HLR. Also, as was pointed out, Tomoike deals with load balancing issues for gateway selection in the scenario of content retrieval. Thus, it does not use any location information of mobile terminals for call routing, which is the focus of our invention. Accordingly, the above claims are not obvious in view of the cited references.

As to Claims 8, 18 and 27, Gallant clearly does not disclose a unified location manager that is operable as a home location register, since the reference does not address storing mobile user location information for mobile networks. Nor does the Tomoike reference or the combination of references address this deficiency, since neither reference addresses the same problem as the instant invention.

With regard to Claim 21, neither reference discloses the use of mobile location related information for use in selection of a gateway. Moreover, in Gallant's, NMS has status information of gateways, not mobile terminals as in the UMM of our invention. The RS is only a SIP redirecting server, which is quite different from our invention of using UMM that has unified location information of mobile terminals. Also, as Tomoike discloses a method for content retrieval, the format conversion in his invention is to convert content format, which is different from signaling protocol conversion in our invention. Additionally, Tomoike's invention does not use mobile user location information for selection of gateway, but load information of gateways. As was mentioned above, Tomoike's method is for content retrieval and content conversion, which is different from signaling protocol conversion. Thus, the selected gateway in Tomoike's invention cannot be employed to translate a signaling protocol into a protocol independent form as

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is claimed in Claim 21. Accordingly Claim 21 is non-obvious in view of the cited prior art.

Based on the above remarks and the amendments to the claims, applicants submit that the claims have been shown to be allowable in view of the prior art and that the basis for any rejections has been overcome.

Drawings

Applicants submit herewith formal copies of Figs. 1, 2 and 6 as requested.

Conclusion

In view of the foregoing, allowance of all the claims presently in the application is respectfully requested, as is passage to issuance of the application. If the Examiner should feel that the application is not yet in a condition for allowance and that a telephone interview would be useful, he is invited to contact Applicants' undersigned attorney at 732-949-9742.

Respectfully submitted,

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